

AMENDMENTS TO CLAIMS

- This listing of Claims shall replace all prior versions, and listings, of Claims in the application:

1. (Currently Amended) An apparatus ~~adapted for treating at least one substrate/workpiece in a plasma~~, comprising:

- (a) a chamber defining an interior space;
- (b) a component for generating a plasma in said interior space of said chamber;
- (c) a mounting component adapted for positioning at least one substrate/workpiece in said interior space of said chamber for receiving treatment in said plasma;
- (d) a gas supply component for injecting at least one gas into said interior space of said chamber; and ~~, comprising:~~
 - (i) ~~an inlet portion extending exteriorly of said chamber;~~
 - (ii) ~~an outlet portion extending into said chamber and including a pair of arcuately shaped tubular gas outlet elements for injecting at least one gas into said interior space; and~~
 - iii) ~~an electrically insulating sleeve located at an opening in a wall of said chamber between said inlet portion and said outlet portion;~~
- (e) a component for applying a bias potential to said gas supply component for suppressing plasma formation at ~~said gas~~ gas outlet elements, wherein said component for applying a bias potential is electrically isolated from said component for generating said plasma. ~~a plasma~~; and
- (f) ~~a spaced apart pair of cathode/target assemblies wherein said mounting component positions at least one substrate/workpiece in the space between said pair of cathode/target assemblies, and said arcuately shaped tubular gas outlet elements are positioned between said spaced apart pair of cathode/target assemblies.~~

2. (Currently Amended) The apparatus of claim 1, ~~wherein said~~ further comprising an electrically insulating sleeve that is operable to electrically isolates isolate said gas supply component from said chamber and said component for generating said plasma.

3. (Currently Amended) The apparatus of ~~claim 2~~ claim 1, wherein ~~said~~ an outlet portion of said gas supply component extends through an electrically insulated opening in a wall of said chamber.

4. (Previously Presented) The apparatus of claim 1, wherein said component for applying said bias potential comprises a component for applying one of a DC, AC, and RF bias potential.

5. (Currently Amended) The apparatus of ~~claim 4~~ claim 1, wherein said component for applying said bias potential comprises a component for applying a selected polarity DC bias potential of up to about 1,000 V.

6. (Currently Amended) The apparatus of claim 1, wherein said interior space of said chamber is ~~adapted~~ operable to be maintained at a reduced pressure.

7. (Currently Amended) The apparatus of claim 1, wherein said apparatus is ~~adapted~~ operable to perform a plasma treatment selected from the group consisting of sputter etching, reactive sputter etching, sputter deposition, and reactive sputter deposition.

8. (Currently Amended) The apparatus of ~~claim 7~~ claim 1, wherein said apparatus is ~~adapted~~ operable to perform one of a sputter deposition and a reactive sputter deposition operation.

9-10 (Canceled)

11. (Currently Amended) A method ~~of treating at least one substrate/workpiece in a chamber,~~ comprising ~~steps of:~~

(a) electrically insulating an opening in a wall of ~~said~~ a chamber between portions of a gas supply component using an electrically insulating sleeve;

(b) ~~mounting/~~positioning at least one substrate/workpiece ~~between a spaced-apart pair of cathode/target assemblies~~ in ~~said~~ an interior space of said chamber;

(c) injecting at least one gas ~~between said spaced-apart pair of cathode/target assemblies~~ into said interior space using said gas supply component wherein said gas supply component comprises ~~a pair of arcuately shaped tubular~~ gas outlet portions;

(d) generating a plasma in said interior space of said chamber ~~via said component for generating a plasma~~;

(e) applying a bias potential to said gas supply component to suppress plasma formation at said ~~at least one outlet orifice~~ gas outlet portions, wherein said gas supply component is electrically isolated from a component for generating ~~a~~ said plasma; and

(f) ~~treating/~~processing said at least one substrate/workpiece in said plasma.

12. (Previously Presented) The method according to claim 11, wherein said chamber is adapted to be maintained at a reduced pressure.

13. (Currently Amended) The method according to ~~claim 12~~ claim 11, ~~wherein said further comprising a component for generating a said plasma is adapted that is operable to~~ perform a plasma treatment selected from the group consisting of sputter etching, reactive sputter etching, sputter deposition, and reactive sputter deposition.

14. (Currently Amended) The method according to ~~claim 13~~ claim 11, ~~wherein: said further comprising a component for generating a said plasma is adapted that is operable to~~ perform one of a sputter deposition and a reactive sputter deposition operation.

15 (Canceled)

16. (Currently Amended) The method according to ~~claim 14~~ claim 11, ~~wherein: wherein~~ said (b) positioning comprises mounting/~~positioning~~ said at least one ~~disk-shaped~~

substrate/workpiece for one of a magnetic and a magneto-optical (MO) recording medium,
wherein said at least one substrate/workpiece is disk shaped.

17. (Currently Amended) The method according to ~~claim 16~~ claim 11, ~~wherein:~~ wherein said ~~(f)~~ processing comprises reactive sputtering of a ferromagnetic target material in an oxygen containing said plasma to deposit an oxygen-containing ferromagnetic layer on each surface of said at least one substrate/workpiece.

18. (Currently Amended) The method according to claim 11, ~~wherein:~~ wherein said ~~(e)~~ injecting comprises injecting at least one gas into said interior space of said chamber using said gas supply component, wherein said gas supply component comprises an inlet portion extending exteriorly of said chamber and an outlet portion extending into said chamber via said electrically insulating sleeve.

19. (Currently Amended) The method according to claim 11, ~~wherein:~~ wherein said ~~(e)~~ applying comprises applying one of a DC, AC, and RF bias potential.

20. (Currently Amended) The method according to ~~claim 19~~ claim 11, ~~wherein:~~ wherein said ~~(e)~~ applying comprises applying a selected polarity DC bias potential of up to about 1,000 V.